accounting-rate mechanism poses serious problems.[5] Countries with competitive international long distance markets tend to have lower prices than their foreign, monopoly counterparts. In the United States, interexchange carriers systematically generate more calls than do carriers in other countries, because U.S. consumer prices are lower spurring higher demand. The imbalance in minutes results in the United States makes outpayments to foreign firms, based on the accounting rate. Foreign monopolies refuse to negotiate cost-based accounting rates in order to maximize the amount of U.S. outpayments received. The following is a detailed look at the way this process works in practice.

Imbalances in Traffic Flows

Much of the growth in the U.S. telecom trade deficit is caused by increasing demand in the United States coupled with depressed demand overseas caused by the above-cost prices of the monopoly. Growth in U.S.-outbound minutes has averaged 14 percent annually since 1989 compared with 10 percent growth in calls to the United States.[6] (See Figure below) The United States generated 14.9 billion minutes of traffic to foreign destinations in 1995 and an estimated 16.8 billion in 1996.[7] Traffic flows to the United States are considerably less, topping 7.13 billion and an estimated 7.8 billion in 1995 and 1996, respectively.

---

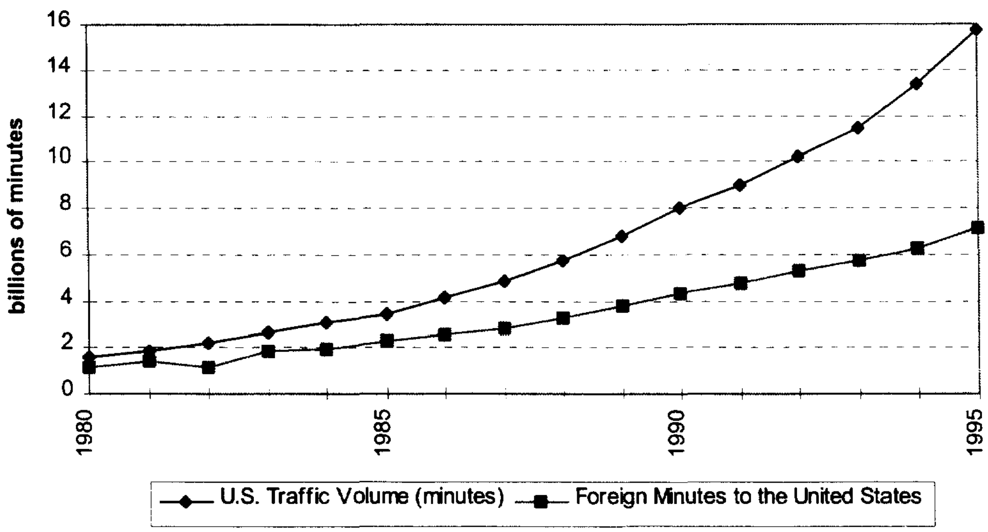
[5] There is also profound evidence that foreign monopolies charge U.S. firms a higher accounting rate than they charge firms in other countries, despite no indication that costs are different. See Economic Strategy Institute. *See., Crossed Wires: How Foreign Regulations and U.S. Policies Are Holding Back the U.S. Telecommunications Services Industry.* (Washington, DC: Economic Strategy Institute, December 1994).

[6] Federal Communications Commission. *Trends in the International Telecommunications Industry.* (Washington, DC: FCC, August 1996), p. 19.

[7] The 1996 estimate was derived by extrapolating current growth trends.

Figure 1: Growth in U.S. Inbound and Outbound Minutes, 1980-1995

Source: Federal Communications Commission. Statistics of Communications Common Carriers 1993/1994. (Washington: DC. FCC, 1993/1994), p 208 and Federal Communications Commission. Trends in the International Telecommunications Industry. (Washington: DC. FCC, 1996).



The main driver in the growth of U.S. minutes is price reductions spurred by greater competition. As competition increases and prices decline, traffic flows increase dramatically, depending on the country of destination.[8] A second, less important driver is the proliferation of new technologies and service offerings, particularly international call-back services.[9] A recent study estimated that call back services now account for $1 billion of the estimated $55 billion global international telephone market.[10] Call backs remain an important growth factor only in the sense that they exploit an arbitrage opportunity created by falling U.S. prices.

---

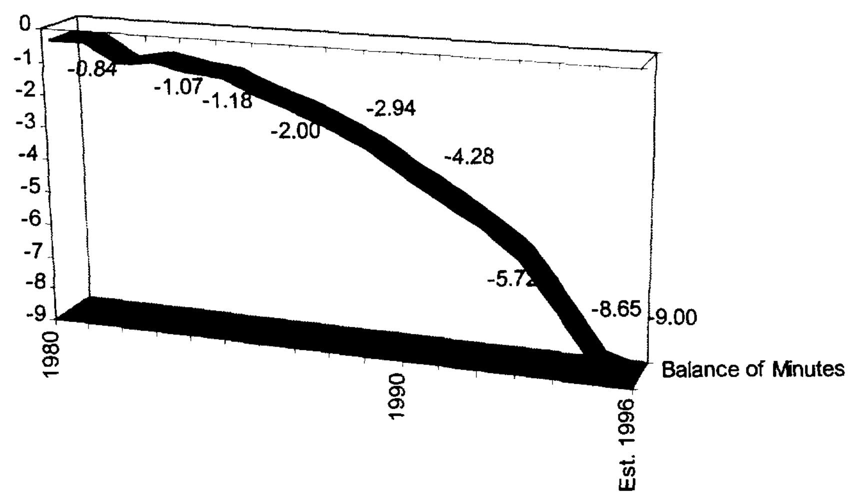
[8] For a detailed analysis of demand elasticity in international telecommunications, *See.,* Economic Strategy Institute. *Does Deregulation Matter? A Case Study of the Impact of International Telecommunications Market Competition on Calling Rates and Demand Pattern.* (Washington, DC: May 9, 1995)

[9] Call back services (offered mainly by U.S. firms) allow a person in a foreign country to call another country at a substantial discount by routing the call through the United States. The customer calls a number in the United States that provides a dial tone and connects the customer to the destination number at lower U.S. prices. Although customers save up to seventy-five percent on the call, the United States adds to its outbound minutes and eventually widens trade deficit.

[10] Telegeography, 1996.

Figure 2: Growing Disparity between US Outgoing and Incoming Minutes, 1980-1995

Source: Federal Communications Commission. Statistics of Communications Common Carriers 1993/1994. (Washington: DC. FCC, 1993/1994), p 208 and Federal Communications Commission. Trends in the International Telecommunications Industry. (Washington: DC. FCC, 1996).



As Figure 2 shows, there is a growing deficit between the number of minutes the United States generates and receives (or terminates). Between 1985 and 1995, the gap between originated and terminated international traffic has climbed by an order of magnitude, from 800 million minutes to 8 billion minutes. This has significantly increased the number of minutes U.S. firms are required to pay under the accounting rate regime, and hence, has boosted U.S. outpayments.

Growing US Net Settlement Outpayments

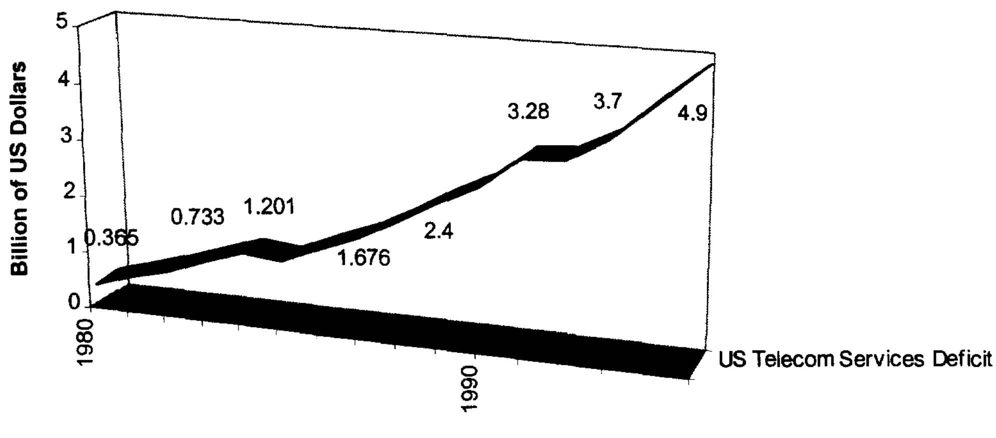
As a result of above-cost accounting rates and higher traffic volume from the United States, the U.S. trade deficit in telecom services (e.g. net settlement outpayments) have skyrocketted from $365 million in 1980 to more than $4.9 billion in 1995.[11] (See Figure 3 below) The forecast 1996 deficit is approximately $5.6 billion.[12]

[11] Federal Communications Commission. *Trends in the International Telecommunications Industry.* (Washington, DC: FCC, August 1996), p. 19.

[12] Estimate by Economic Strategy Institute.

Figure 3: Increasing US Net Settlement Outpayments, 1980-1995

Source: Federal Communications Commission. *Trends in the International Telecommunications Industry.* (Washington: DC. FCC, 1996).



Total U.S. outpayments since 1980 have equaled $34.75 billion. Moreover, greater than two-thirds of this amount, $22.3 billion, has been accumulated since 1990.

Proliferation of Above-Cost Accounting Rates

Accounting rates between the United States and foreign destinations have actually been falling since the mid-1980s. These reductions can be partly attributed to the FCC's benchmarking efforts and other U.S. policies, the liberalization of international private-line services, the growing proliferation of private networks, and pressure from U.S. firms and domestic interests. As the FCC notes, the accounting rate declined by 50 percent in Germany, 53.5 percent in the United Kingdom, 70 percent in France, and 30 percent in Spain from 1988 to 1994.[13] Since 1994, rates have fallen even more rapidly. For example, the rate with Germany has fallen from $1.32 in 1985 to $0.23 cents in November 1996. The U.S.-Australia accounting rate has fallen from $1.65 to $0.50 while the U.S.-U.K. rate has fallen from $1.06 to $0.21 during the same period.[14] Figure 4 shows the decline in the unweighted accounting rate average, from $2.20 in 1986 to less than $1.20 in 1996.

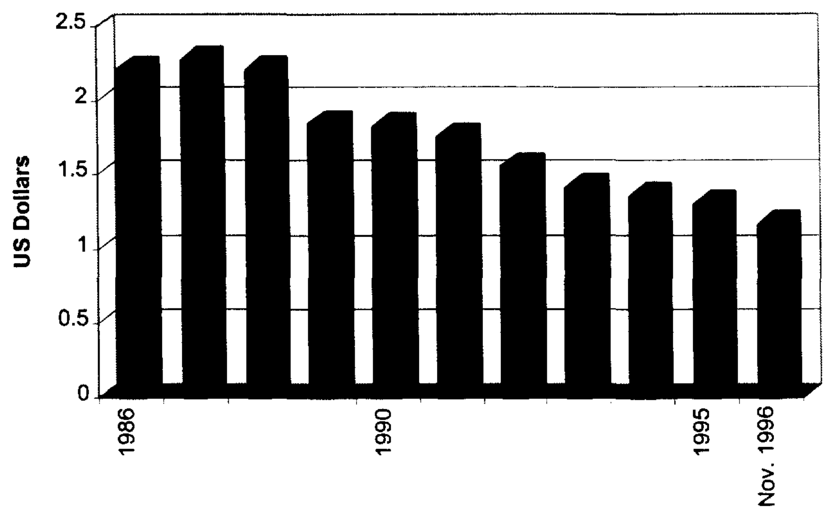
---

[13] Federal Communications Commission, *Policy Statement on International Accounting Rate Reform.* FCC 96-37. January 31, 1996.

[14] Ibid.

Figure 4: Decline in U.S. Accounting Rates, Unweighted Average

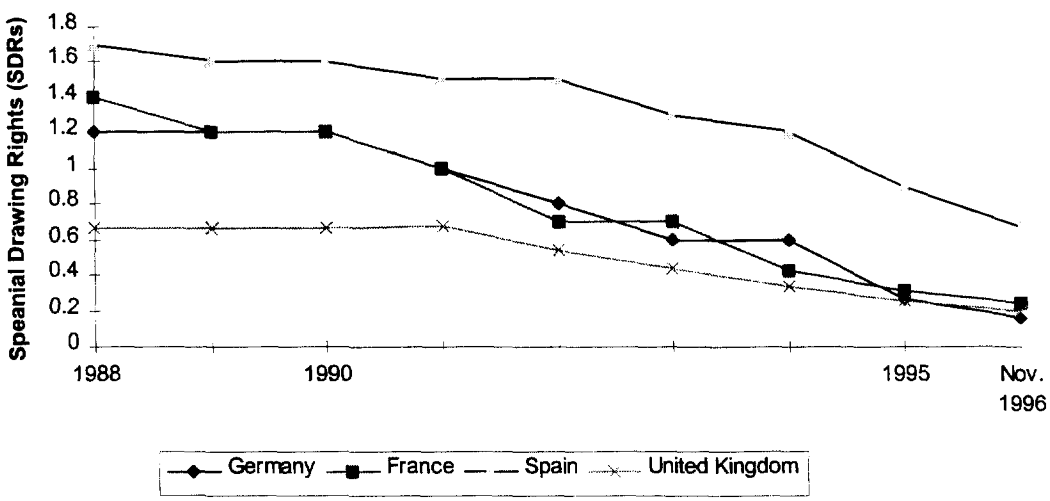
Source: Federal Communications Commission. *Trends in the International Telecommunications Industry.* (Washington: DC. FCC, 1996).



The decline in bilateral accounting rates has been most dramatic with members of the European Union. Differences in accounting rates between the United States and individual E.U. member states can be circumvented by routing calls through intermediary E.U. member countries with the lower accounting rate. To minimize this arbitrage opportunity, European PTOs have ensured that their respective accounting rates with the United States were similar. Figure 5 shows declines in accounting rates for selected European countries.

Figure 5: Historical Accounting Rates Between the United States and Selected EU Member States

Source: Federal Communications Commission. *Statistics of Communications Common Carriers 1993/1994.* (Washington: DC. FCC, 1993/1994), p 208 and Federal Communications Commission. *Trends in the International Telecommunications Industry.* (Washington: DC. FCC, 1996).



The Organization of Economic Cooperation and Development has estimated that, among selected countries, accounting rates have fallen 24 percent, from 1991-1994.[15] AT&T's 38 percent decline in the U.S. accounting rate lead the pack, followed by a 34 percent decline in U.K. accounting rates. As the table below indicates, accounting rates between the United States and other countries have fallen more rapidly than declines among foreign countries. The sole exception to this is the U.S. accounting rate with North America which has only decreased 15 percent due primarily with difficulties negotiating lower rates with Telefoños de Mexico.

[15] The nine selected countries were France, Greece, Ireland, Italy, Japan (KDD), Netherlands, New Zealand (Telecom New Zealand), United Kingdom (British Telecom), and the United States (AT&T).

Figure 6: Accounting Rate Reductions for Selected OECD Countries, 1991-1994.

Source: Organization of Economic Cooperation and Development. *New Technologies and their Impact on the Accounting Rate System.* (Paris: OECD, Jan. 1996), p 16.

	Europe	**N. America**	**Asia-Pacific**	**All OECD (weighted average)**
From:				
France	21%	50%	33%	25%
Greece	20%	21%	40%	23%
Ireland	9%	43%	21%	13%
Italy	8%	48%	37%	15%
Japan (KDD)	33%	51%	44%	35%
Netherlands	29%	58%	34%	32%
NZ (TCNZ)	21%	57%	38%	26%
UK (BT)	5%	36%	25%	10%
U.S. (AT&T)	37%	15%	50%	28%
Average	*20%*	*42%*	*36%*	*24%*
Europe	15%	43%	32%	20%
U.S.	37%	15%	50%	38%
Asia (Japan, NZ)	27%	54%	41%	31%

The Above-Cost Component of the Accounting Rate Charge

Despite this progress, accounting rates remain significantly above the cost of originating and terminating international telephone calls. Estimating the level of non-cost based settlement payments requires information on the costs of the foreign network as well as traffic flows, network configuration, and network equipment quality. While these figures are elusive, there is a significant body of research on estimating these costs and widespread agreement that above-cost charges account for more than 70 percent of accounting rate.[16]

Estimates of the cost of an international call place the accounting rate between 5 and 9 cents per minute, on average. The cost of terminating international call can be dissected into three major components: the cost of the transatlantic fiber, the international gateway, and the domestic network. While there is ample cost analysis from both U.S. and foreign (developing and developed) sources offering persuasive evidence that the global average cost is closer to 6 cents, for the purposes of this study the Economic Strategy Institute is assuming a

---

[16] *See.*, Strategic Policy Research, *The U.S. Stake in Competitive Global Telecommunications Services: The Economic Case for Tough Bargaining*, (Washington, D.C.: Strategic Policy Institute, December 1993), p. 3. *Crossed Wires: How Foreign Regulations and U.S. Policies Are Holding Back the U.S. Telecommunications Services Industry.* (Washington, DC: Economic Strategy Institute, December 1994). Federal Communications Commission, *Report and Order - Regulation of International Accounting Rates*, (Washington D.C.: Federal Communications Commission, 23 May 1991), p. 3555.

global average of 9 cents per minute.[17] The Federal Communications Commission estimates that 75 percent of the $4.9 billion settlement payment in 1995 was non-cost based.[18] The Economic Strategy Institute, employing the aforementioned methodology, has reached a similar conclusion, estimating the figure is slightly higher at 88 percent.

In order to translate a more accurate idea of the impact of the accounting rate regime, ESI has created a weighted average of the accounting rate. The average weighs accounting rates based on present and future traffic flows on the busiest U.S.-foreign and foreign-U.S. routes.[19] The weighted accounting rate for 1995 is $0.564 and $0.55 for 1996. When factoring in the conservative long run incremental cost (LRIC) accounting rate estimate of 9 cents, the percentage of the weighted average that is non-cost justified, and therefore a subsidy from American consumers to foreign firms, is 85.5 percent.

Since investment cost per minute decline as traffic increases, ESI conservatively estimates the cost of terminating international traffic will decrease by 2.8 percent annually through the year 2005.[20] Based on these figures, the Economic Strategy Institute is confident that the long run incremental cost of terminating U.S. outbound traffic will be no greater than $0.067 cents per minute in the year 2005.

Non-Cost Justified Settlement Payments

This places ESI's estimate of the non-cost based subsidy to foreign firms at $4.19 billion compared with the Commission's $3.75 billion estimate. Regardless of the exact figure, the conclusion that a huge burden is placed on American consumers and firms through above cost accounting rates can not be disputed. It is illustrative to note that previous estimates of future U.S. outpayments have been notoriously low. An ESI study published in December 1994 estimated that above-cost outpayments would top $2.4 billion in 1995.[21]

---

[17] For an in-depth LRIC analysis of developed and developing countries, *See, e.g.*, Federal Communications Commission. *In the Matter of International Settlement Rates: Notice of Proposed Rulemaking*. FCC 96-484. (Washington, D.C.: FCC, December 19, 1996), paragraph 8. *Also see, e.g.*, Ovum. Ltd. *Interconnection: The Key to Competition*. (London, U.K.: Ovum, Ltd., 1996).

[18] Federal Communications Commission. *In the Matter of International Settlement Rates: Notice of Proposed Rulemaking*. FCC 96-484. (Washington, D.C.: FCC, December 19, 1996), paragraph 8.

[19] The weighted average in based on the 16 busiest international routes in 1995. While the importance of these routes will change, the major routes (carrying most of the weight in the measure) are not predicted to change dramatically. It takes into account U.S. inbound and outbound calls, but does not consider differences between peak and off-peak rates.

[20] This assumes that the LRIC of the network components dedicated to the termination of international calls experience a 5 percent increase in minute traffic each year. This number is very conservative given current U.S. outbound traffic growth rates of 14 percent, alone.

[21] Olbeter, Erik R. and Chimerine, Lawrence. *Crossed Wires: How Foreign Regulations and U.S. Policies Are Holding Back the U.S. Telecommunications Services Industry*. (Washington, DC: Economic Strategy Institute, December 1994).

Not only was this off by nearly 40 percent, but it was ridiculed as a product of "the most pessimistic scenario conceivable" .[22] The primary reason for such low predictions was the conventional wisdom, still propagated in some circles, that alternatives to the accounting rate regime would move traffic off the PSTN.

Conclusion

The international telephone market is dominated by the public switched telephone network. While many new innovations have emerged to challenge its predominance and above-cost accounting rates, they are inherently at the mercy of regulatory authorities and their commitment to implementing competitive markets. As a result, they have failed to "break the back" of the accounting rate regime. From 1980 to 1995, the United States has paid more than $25 billion in above-cost accounting rates. This figure continues to increase despite falling accounting rates and existing policy efforts to contain the problem.

As the industry becomes more global in reach and scope, the accounting rate problem could pose even more ominous difficulties in and above the taxing of American consumers and firms. U.S. consumers and firms could be subject to a "triple-whammy" of above-cost accounting rate, higher prices for U.S. outgoing calls than created by a competitive market, and anticompetitive behavior that threatens the long-term competitive position of the U.S. telecommunications industry. The anticompetitive threats are the subject of the next section.

[22] Conversation with the Vice President for Government Affairs for the U.S. affiliate of a foreign PTO, January 1995.

Anticompetitive Considerations of Above-Cost Accounting Rates: The Potential for Price Squeeze[23]

Defining the Price Squeeze

Above-cost accounting rates on routes where foreign firms maintain significant market power, raise the specter of price squeeze in domestic telecom markets through foreign subsidiaries.

A price squeeze occurs when a strong firm or firms in one industry act to squeeze the price of a major product in an industry, primarily with the intent of making it difficult for a rival to compete. This may happen in two ways. First, a firm can lower prices below the average cost of production for a substantial period of time. This makes it difficult for a rival to exist because profits decline dramatically or disappear. Second, a firm can raise the cost of an intermediate product or service -- one example in telecommunications might be an interconnection charge -- so that the price that a rival charges does not provide for as much profit as the rival might have obtained without such high charges.

The price squeeze problem faced by firms in the inter-LATA, domestic market, will soon be seen in the international market. Foreign firms with significant market power maintain the ability to raise the price of inputs for U.S. firms via the accounting rate mechanism. As foreign firms with monopoly power overseas enter the U.S. market, the problem of the price squeeze can become more acute.

For example, assume that Telefonica creates a separate affiliate to provide inter-LATA domestic and international services in the United States. This affiliate receives an infusion of cash from Telefonica and competes with other long distance providers on the U.S-Spain route. Telefonica could use its monopoly power to protract or raise already above-cost accounting rates (i.e. include some of the costs of its U.S. affiliate in the charge), and then underprice competitors along domestic and international service routes. In addition,

---

[23] For a detailed analysis, *See, e.g.* Cohen, Dr. Robert. *International Message Telephone Service and Competition: An Economic Analysis of Price Squeezes and Its Implication for International Settlement Rates and Rules on Foreign Entry into the U.S. Communications Industry.* (Washington DC: Economic Strategy Institute, February 1997)

Telefonica could replicate this pattern on other routes where it maintains a monopoly in the foreign country, e.g., Argentina.

If the market for foreign international facilities-based communications is competitive (and assuming no capacity restraints exist), then foreign firms cannot raise prices without losing business and hence no price squeeze can occur. However, there are very few countries where facilities-based competition exists, and it is unlikely that countries receiving huge net settlement payments from the United States will exhibit competitive markets within the next ten years. Even in the most optimistic scenario, true competition in Europe's market will not take hold until well after the start of the next decade – later in developing countries.

Price Squeeze in Intra-LATA Services – CC Docket No. 96-149[24]

In 1996, the Common Carrier Bureau, recognizing the potential for anticompetitive behavior from RBOC entry into the intra-LATA market, concluded a rulemaking to minimize the anticompetitive dangers from price squeeze behavior.25 Of particular concern in this matter is whether BOC affiliates should be classified as dominant in the in-region, interstate domestic inter-LATA, in-region, interstate, domestic, interexchange services, and international interexchange market. The determination to whether firms should be placed under greater regulatory scrutiny rests upon their ability to exercise market power, i.e. whether firms can raise and sustain prices by restricting their own output, or to raise and sustain prices by increasing their rivals' costs, or by restricting their rivals' output through control of essential facilities.

The Argument for Anti-Competitive Safeguards

As is the case with all vertically integrated firms that control essential facilities, the BOCs have the opportunity and incentive to price squeeze by passing costs from competitive to bottleneck markets. It is also possible for the vertically integrated firm to discriminate in quality of service and reduce the quality of services offered by its competitors. This practice may lead to higher costs and lower quality for consumers in the short and long-term.

---

24 This section draws heavily on *Reply Comments* submitted by Dr. Bob Cohen and Erik Olbeter of the Economic Strategy Institute, August 30, 1996.

25 Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as amended, and Regulatory Treatment of LEC Provision of Interexchange Services Originating in the LEC's Local Exchange Area, CC Docket No. 96-149, First Report and Order, FCC 96-489 (rel. Dec. 24, 1996).

While the Telecommunications Act of 1996 and technological developments will undoubtedly change the nature of competition in the local exchange – and already have in many respects – this process is not rapid, nor does it impact all markets of the local loop. Many studies and analyses have predicted and still maintain that while the local loop is no longer a natural monopoly, LECs have and will continue to hold a monopoly over access services to the local loop, despite this technological progress.[26] Even with a rapid roll-out of technologies that bypass LEC facilities and connect directly with customers, these services will not supply the capacity or substitutability necessary for a truly competitive market.[27]

Monopoly control over bottleneck facilities, if unregulated, can and will lead directly to the increase in rival costs and higher prices for these services. In the presence of price cap regulation on a monopoly market, companies shift to imputation as the way to increase revenue and gain leverage in the market. The bottleneck controller can impose extra costs through the interface with the bottleneck, and raise the price of its competitors in the downstream activity. By raising the price of inputs of its competitors or decreasing the quality of service (an equally plausible alternative), its affiliate will enjoy either higher profit margins or higher quality service, and will attract a greater number of customers. By doing so, the regulated activity charges above-cost based rates to all firms in the competitive marketplace, including its own affiliate, and the latter is left with a cost structure that is less than that of its rivals.

Vertically integrated companies have intrinsic incentives to use the power held in one market to maximize overall revenue. The shifting of costs, even on the order of $0.01 per minute, can lead to substantial cost advantages and a price squeeze effect that can drive other competitors out of the market. The imperfections of cost accounting leave ample room to try to transfer common costs, and it would be irresponsible not to adopt a cost accounting methodology that did not benefit them – their competitors certainly will advocate such methodologies. In the end, the vertical monopoly

---

26 *See, e.g.*, Chimerine, Cohen, Olbeter, *Eliminating Monopolies and Barriers: How to Make the US Telecommunications Industry Truly Competitive*, (Washington: Economic Strategy Institute), June 1995.

27 *See, e.g.*, William J Baumol and Gregory Sidak, *The Pricing of Inputs Sold to Competitors*, 11 Yale Journal on Regulation, 171 (1994). While asserting that technology and regulatory liberalization would break the local loop monopoly, the authors concluded that, despite this, access services would remain a naturalistic monopoly. *Also see, e.g.*, Lawrence A Sullivan, *Elusive Goals Under the Telecommunications Act: Preserving Long Distance Competition Upon Baby Bell Entry and Attaining Local Exchange Competition: We'll Not Preserve the One Unless We Attain the Other*, 25 Southwestern University Law Review, (1996).

has all of the cards at the negotiating table – they control the essential facilities the other operator needs to compete.

A further incentive stems from the difficulty of actually imposing regulations that deny opportunities for anticompetitive behavior. There will always be gray areas in regulations and these areas will be exploited by vertically integrated firms to thwart competitors.[28] As regulations become more precise, firms become more savvy. The Commission has heard time and time again of "minor infractions," for example, in the AT&T - New York Telephone case, stories of colocation cages taking 9 to 13 months to build, and problems MCI has faced in getting unbundled loop components (the RBOC in this case changed the wrong components). Kick-codes and T-caps also have exemplified the incentives for the BOCs to raise the price of their competitors even before they have entered the market – now that they are entering the market, the incentives will be heightened by an order of magnitude.[29]

Interconnection requires cooperation. However, cooperation among firms in a competitive market is not a natural relationship. Interconnection between a vertically integrated firm and its competitor in an affiliated market is a contentious affair where the monopoly is unwilling and the regulator is holding the legal and punitive carrot and stick. The vertical monopoly may have no choice but to interconnect. However, if it can transfer market power or stymie its adversaries, it will.

The Common Carrier Final Rulemaking

In its Order, the Common Carrier Bureau reaffirmed its belief that the dangers of the price squeeze required the establishment of non-accounting safeguards designed to ensure that monopoly power in one market is not transferred to another through the price of inputs.

> "If a BOC charges other firms prices for inputs that are higher than the prices charged, or effectively charged, to the BOC's section 272 affiliate, then the BOC could create a "price squeeze." In that circumstance, the BOC affiliate could lower its retail price to reflect its unfair cost advantage, and competing providers would be forced either to match the price reduction and absorb profit margin reductions

[28] *See, e.g.*, Nina W. Cornell, Speech given at Federal Communications Commission, Economic Forum: Antitrust and Economic Issues, July 23, 1996.
[29] *See, e.g.*, Nina W. Cornell, Speech given at Federal Communications Commission, Economic Forum: Antitrust and Economic Issues, July 23, 1996.

> or maintain their retail prices at existing levels and accept market share reductions. This artificial advantage may allow the BOC affiliate to win customers even though a competing carrier may be a more efficient provider in serving the customer."[30]

The *Report and Order* attempts to maintain the delicate balance between introducing competitive pressure and protecting the market against anti-competitive behavior. The Bureau recognized that this non-accounting safeguards were necessary and justified until a time as facilities-based alternatives were available in the local exchange and exchange services market.

The Common Carrier Bureau's analysis is applicable to the situation in the international telecom service market today – and will continue to be applicable until facilities-based competition or alternative service market bring input prices (i.e. settlement rates to TSLRIC).

Price Squeeze in International Services via the Accounting Rate

A companion study by Dr. Robert Cohen[31], concluded that the potential for anticompetitive behavior via a price squeeze is a real and imminent danger.

> "This review of price squeeze and transfer pricing literature suggests that a foreign-owned telecommunications subsidiary operating in the U.S. economy could have a significant anticompetitive impact by using a price squeeze. This analysis asserts that the FCC needs to view a price squeeze in a larger context. It may have important implications for the way that large, vertically integrated telecommunications firms exert market power in the U.S. and world economies."[32]

A price squeeze may benefit consumers in the short run by reducing rates for some international calls. Nevertheless, it would be harmful to U.S. interests over the long run, especially if U.S. operators were unable to respond to such anticompetitive actions. In fact, as Dr. Cohen notes,

> "...there is an additional motivation for an international telecommunications company to use a price squeeze, transfer pricing. With transfer pricing, a parent firm could charge some of its costs of research and development, new investment, and other services to a U.S. branch

---

30 Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as amended, and Regulatory Treatment of LEC Provision of Interexchange Services Originating in the LEC's Local Exchange Area, CC Docket No. 96-149, First Report and Order, FCC 96-489 (rel. Dec. 24, 1996) at para. 10.

31 Ibid., p. 37.

32 Ibid.

> or affiliate. This would reduce the profitability of an entity in the United States[33] and strengthen the competitive position of its parent. On the other hand, some firms might use transfer pricing to increase the funds a U.S. affiliate could use to expand its operations, acting as a cash infusion. In the case of oligopolistic international markets, firms can couple transfer pricing with a price squeeze. Thus, regulators and policy makers should examine transfer pricing in a broader context, particularly for firms that operate in communications where market power is a key competitive strength. U.S. regulators should not regard transfer pricing as a phenomenon limited to developing nations."[34]

The potential for price squeeze does not depend on the size of the settlement payments that the United States makes to foreign countries. In other words, outpayments, in and of themselves, do not lead to the potential for anticompetitive behavior and may be a natural evolution of market trends and traffic flows. The threat originates from above-cost accounting rates that are in essence monopoly profits not related to the provision of service. These monies can be transferred back into the U.S. affiliate and cause major structural and competitive damage to U.S. telecommunications markets and the entire economy. The challenge for policymakers is create regulations that forbid the extraction of monopoly-type profits from U.S. consumers and firms. The next section reviews the policy steps taken so far to address this problem.

---

33 While recent research on transfer pricing does not include many cases of its use between developed nations, Anita M. Benvignati does note that transfer pricing is likely to be more problematic for government officials. This is largely due to the fact that foreign transfers are more frequently priced on a non-market basis than domestic transfers by large firms included in a sample reporting to the U.S. Federal Trade Commission in the mid 1970s. See Anita M. Benvignati, "An Empirical Investigation of International Transfer Pricing by US Manufacturing Firms," in Rugman and Eden, Multinationals and Transfer Pricing, 1985, pp. 193-211.

34 Cohen, Dr. Robert. *International Message Telephone Service and Competition: An Economic Analysis of Price Squeezes and Its Implication for International Settlement Rates and Rules on Foreign Entry into the U.S. Communications Industry*. (Washington DC: Economic Strategy Institute, February 1997), p. 37.

Current Market Entry and Accounting Rate Policies

FCC Regulations of Foreign Market Entry

In 1995, the Federal Communications Commission issued a *Report and Order*, establishing procedures for reviewing foreign investment proposals or affiliation with U.S. communications companies.[35] In comparison with the *ad hoc* method that had been employed by the FCC, this new procedure makes it clear to all involved exactly what the FCC is deeming relevant and critical to their approval of foreign investment in a U.S. carrier. This procedure is applied to any partnership in which a foreign firm, or group of firms, has ownership interest of greater than 25 percent, or a controlling interest at any level.[36] The FCC has retained the right to apply these procedures to those international routes on which U.S. carriers are involved in co-marketing plans, joint-ventures, or any other partnership arrangement with foreign dominant carriers, even if there has been no exchange of equity.[37]

The *Report and Order* lays out a three step review of the overall public interest of a common carrier license for a foreign entity under section 214 and 310 of the 1934 Communications Act:

- *Legality Test.* Decision on the extent to which entry by a U.S. carrier is either legal or illegal in the home market of foreign company seeking the carrier license

- *ECO Test.* Application of an effective competitive opportunity (ECO) test, to examine the extent to which there are any de facto or practical barriers to competition in the home market of the firm applying for the U.S. carrier licensee, given that foreign entrance is indeed legal.

---

35 Federal Communications Commission. *Rule making in the Matter of Market Entry and Regulation of Foreign-affiliate Entities.* (Washington, D.C. Federal Communications Commission, November 1995).

36 The Commission specified firm or group of firms because it did not want companies to be able to evade FCC scrutiny by entering into partnerships with more than one foreign firm.

37 Federal Communications Commission. *Rule making in the Matter of Market Entry and Regulation of Foreign-affiliate Entities.* (Washington, D.C. Federal Communications Commission, November 1995), p.253

- *Specific Public Interest Analysis.* Consideration of five additional public interest factors relating to the investment proposal. One of these factors is the existence of cost-based accounting rates.

The FCC also specified that this procedure will only be applied to those foreign entities defined as dominant carriers under FCC rules. The FCC defines a dominant carrier as a firm that has significant control over a market and its pricing through the control of bottleneck in services and/or facilities.[38] Firms that have no control over bottleneck facilities in their own markets are assumed to have no means with which to engage in anticompetitive behavior.

The Commission emphasizes that application of the prescribed factors will be flexible. This provision grants the FCC the flexibility necessary to consider each proposal on unique and relevant merits, as each proposal for investment will have its own personalized impact on the industry. For example, the FCC would approach and assess an investment proposal by a company from a large European nation differently than it would a proposal from a company based in a small South American nation. This is appropriate, since these two situations will impact the U.S. telecommunications industry in completely different ways. While flexibility may seem positive and perhaps even necessary given the dynamic nature of the telecommunications industry, many see this sort of provision as a reincarnation of the FCC's ability to take an ad hoc approach to their consideration of applications. However, it is important that the FCC avoid tying its own hands through a strict procedural process, and be assured that it has the authority to consider all proposals for investment on their individual significance.

The Legality Test

The initial step that the FCC has established for this procedure is an analysis of whether or not U.S. firms have the *de jure* or legal right to compete in the home market of the firm that has made the investment proposal. Through this examination, the FCC will be looking for the existence of any regulatory statutes in the foreign market that either forbid or allow U.S. companies from competing in either facilities-based or resale markets. The FCC has deemed reciprocal access as a major concern when reviewing investment proposals by foreign companies. The FCC has also made it clear that if a market is deemed legally inaccessible by U.S. firms, approval can still be granted for the investment so long as there has been a pre-established plan for the liberalization of the market already instituted and to be carried out over the near future.

The FCC decided that the markets subject to the ECO test will be the primary markets of the carrier seeking entry. Primary markets refer to those telecommunications markets where the carrier has a substantial

---

[38] Federal Communications Commission, Ibid, p.100.

ownership interest in the facilities-based telecommunications entity, has a large market share in either the international or local telecommunications market of the country and has a large flow of traffic between the United States and that country. The foreign carrier could be denied the right to provide service in the United States if any of its primary markets failed the ECO test.

Arguments that foreign carriers should not be held responsible for the policies of their home governments were not accepted by the FCC. The Commission explained that it is not unreasonable to deny access to a foreign carrier based on the policies of its government, since foreign firms have incentives to maximize their own profits by discouraging liberalization moves on the home front by their own governments. If firms choose to continue operating in closed home markets, they cannot be prevented from doing so by the FCC. If they make the decision, though, to continue monopolistic business practices, they will be subject to current 310(b)(4) restrictions in the United States. The FCC believes that foreign firms have the ability to sway policy at home toward liberalization and that imposing the market access test when distributing radio licenses may function to add to those firms' incentive for doing so.

The ECO Test

If the home market of the country attempting to make the investment in the United States does not have any legal barriers blocking the participation of U.S. firms in those markets, the FCC will next test for the presence of any *de facto* or practical barriers to entry and competition in that country. The FCC has designated this as their Effective Competitive Opportunities (ECO) analysis, and has outlined the procedure for this test. There are six factors that will be considered in an effort to make that determination on the state of market access. They are:

- whether U.S. carriers can offer in the foreign country international facilities-based services substantially similar to those that the foreign carrier seeks to offer in the United States;
- whether competitive safeguards exist in the foreign country to protect against anticompetitive and discriminatory practices, including cost-allocation rules to prevent cross-subsidization;
- the availability of published nondiscriminatory charges, terms and conditions for interconnection to foreign domestic carriers; facilities for termination and origination of international services;
- timely and nondiscriminatory disclosure of technical information needed to use or interconnect with carriers' facilities;
- the protection of carrier and customer proprietary information; and
- whether an independent regulatory body with fair and transparent procedures is established to enforce competitive safeguards.

If, using these checkpoints, barriers are determined to exist, and the FCC has reason to believe that they will not be eliminated within a reasonable time period or that they are unable to make the removal of these barriers contingent on approval, it will deny approval of a partnership.

Several of the points of the ECO test require further clarification. For the first criterion, that U.S. firms have the right to offer facilities based services, it needs to be emphasized that a facilities based carrier includes any company that has an indefeasible-right of user or leasehold interest in a U.S. international facility.[39] A second important point is that there is no stipulation that U.S. firms actually provide facilities based service in the foreign market before a deal can be approved, only that there exists the possibility for them to compete there if they so chose.

The second factor the FCC will consider, whether competitive safeguards exist, merits some elaboration as well. The safeguards which will be carefully evaluated include the existence of cost-allocation rules to prevent cross subsidization, timely and nondiscriminatory disclosure of technical information needed to use, or interconnect with, carriers' facilities, and protection of carrier and customer proprietary information.

There is agreement that the six points the FCC will evaluate are important to determining the extent to which foreign markets are accessible to U.S. firms. There were some respondents, however, who felt that some important considerations were relegated to secondary importance by the FCC.[40] An example of such a concern is the decision of the FCC to mandate the presence of cost based accounting rates in the foreign country on incoming calls from the U.S. The FCC has recognized the importance of such factors and has identified them for consideration in the next step of this process.

Specified Public Interest Factors

Assuming that there are no legal or practical barriers to market entry, five "public interest factors" will be considered before approving access to the U.S. international market. The FCC has categorized these additional factors as secondary, because they are not binding in either direction, but still worthy of scrutiny.

- the state of liberalization in the foreign carrier's domestic market and the availability of other market access opportunities to U.S. carriers;
- the status of the foreign carrier as a government or non-government entity;
- the general significance of the proposed entry to promotion of competition in global markets;

---

39 Federal Communications Commission, Ibid, p.4.
40 Federal Communications Commission, Ibid, p.41.

- the presence of cost-based accounting rates;
- national security implications.

When the FCC takes these factors into consideration, it will likely turn to other agencies of the executive branch for consultation of where exactly the public interest lies on these issues. But in the end, the FCC has maintained that they will ultimately still have the right to make the final decision in all of these areas.

The last step in the FCC procedure for approving foreign investment is for the Commission to compare the conclusions of the three previous steps, as well as any additional public interest factors that may specifically relate to the deal, and render a decision. The FCC has maintained that while all the factors are considered, there is no one factor or test that will bind the FCC to a particular decision. Each case will be considered on its own merit. Flexibility in the decision making process, it is argued, will allow the FCC to better gauge the public interest and ensure the maximum level of competition within the U.S. and global telecommunication industries.

FCC Regulations of International Settlement Rates

FCC policies over the last three years have been credited with much of the decline in accounting rates. In 1994, frustrated by above-cost accounting rates and high international calling prices, the FCC established "conservative" benchmark ranges for settlement rates of 0.16-0.27 SDR per minute for European routes and 0.275-0.42 SDR per minute for Asia and all other regions.[41] This policy is responsible for dramatic decreases in settlement rates. Several countries have met the benchmarks, including the United Kingdom, Sweden, Australia, and Singapore, and U.S.-EU accounting rates, despite remaining above cost, have been declining since the late 1980s and more rapidly since the policy was implemented. The average settlement rate declined from 51.5 cents per minute to 36.5 cents per minute in November 1996.[42]

However, one of the main objection to the FCC's *Foreign Market Entry Order* is that cost-based accounting rates were not made a primary criterion of the ECO test.[43] The fear is that if cost based accounting rates are not secured, the foreign carrier will be able to price its U.S.-originated services without regard to the true cost to its U.S. affiliate. Abnormal profits would be recycled into the joint venture between the affiliated firms,

---

[41] Federal Communications Commission, *International Accounting Rate Phase II Second Report and Proposed Rulemaking*, p 8.

[42] Federal Communications Commission. *Trends in the International Telecommunications Industry*. (Washington, DC: FCC, August 1996).

[43] Federal Communications Commission, Ibid., p.58.

while unaffiliated firms would have no way to recoup the high charges resulting from the dominant carrier's ability to unilaterally set its accounting rate.[44]

At the time, the FCC stated that, although the existence of cost-based accounting rates should be reviewed as one criterion for approving agreements, their absence should not be reason to reject them. According to the FCC, the price squeeze placed on competitors as a result of collusion between a dominant foreign carrier and a U.S. partner would not be significant. The FCC argued that to fully control accounting rates a firm would have to control input prices as well as its competitors, the competitive pressures brought on by both consumers and other firms, as well as the negotiating process for the international settlements policy. In addition, according to the FCC, accounting rates would have to discriminate against U.S. firms over a long period of time to truly hurt the unaffiliated firms' ability to compete.

Although the FCC rejected the price squeeze argument with regard to forcing cost-based accounting rates, they also refused to concur with other respondents that the accounting rate problem is one that does not justify intervention. Instead there was recognition of the fact that non-cost-based accounting rates do hurt U.S. businesses and consumers.

Recently, the FCC itself has recognized a need to revise these policies and step up regulatory efforts to reduce accounting rates and protect against monopoly abuses.

> "Despite this progress, accounting rates remain significantly above the cost of originating and terminating international telephone calls. While we recognize a competitive global market might still yield a net U.S. deficit, our concern is that a substantial part of the current settlements outpayments is the result of economically inefficient accounting rates and monopoly pricing practices for consumers in foreign markets. We believe a new approach to accounting rates will better enable us to address these problems."[45]

---

[44] The Economic Strategy Institute echoed this point in its Comments on the Foreign Market Entry Order. *See,* Prestowitz Jr, Clyde V. *Comments of the Economic Strategy Institute on Notice of Proposed Rulemaking in the Matter of Market Entry and Regulation of Foreign-affiliate Entities.* October 5, 1995.

[45] Federal Communications Commission, *Policy Statement on International Accounting Rate Reform.* FCC 96-37. January 31, 1996.

Conclusion: Ability of Current Regulations to Counter the Price Squeeze

Net outpayments to firms with significant market power create opportunities for anticompetitive behavior in otherwise open and competitive domestic telecommunications markets. In particular, above-cost accounting rates on routes where foreign firms maintain significant market power, raise the specter of price squeeze in domestic telecom markets through foreign subsidiaries.

The FCC's *Report and Order on Market Entry and Regulation of Foreign-affiliated Entities* and FCC accounting rate benchmarking are important steps in reducing the U.S. settlement payments deficit as well as encouraging fair, effective competition in the United States. However, accounting rates remain – and will remain – considerably above-cost for the foreseeable future. The next section explores the extent of the problem over the next ten years using four scenario-based forecasting models and how a cost-based benchmarking system can benefit American consumers and firms.

Scenario-Based Forecasting: Current Policies vs. Cost-Based Accounting Rates

Basis for Scenario-Based Models

In a time of widespread and unpredictable regulatory and market reform, it is very difficult to devise one formula to forecast the extent of the problem in the future and the impact of various regulatory remedies. Perhaps the most contentious issue in the literature and in academic circles is the predicted evolution of competitive international telecommunications markets, including not only facilities-based competition, but also alternatives to the PSTN. Many factors – demand, price, regulations, Internet, private network growth, economic conditions, and especially regulatory inertia – will influence the speed and growth of competitive markets abroad.

In order to examine the impact of imposing LRIC accounting rates in such an environment, the Economic Strategy Institute has created four detailed, scenario-based models of the U.S. international PSTN market (outgoing and incoming). The models examine four possibilities created by a pair of oscillating variables – competition and a cost-based benchmarking system – to allow examination of the degree to which foreign firms will be able to price squeeze in the U.S. market. The models produce four important pieces of data through the year 2005: traffic imbalances, accounting rates, non-cost components of accounting rates, and total above-cost subsidies to foreign firms via the accounting rate.

Competition refers to the development of price competition in a foreign country's international outgoing to the U.S. PSTN market. We define a cost-based benchmarking system as one that imposes a ceiling on accounting rates equal to long-run incremental costs (LRIC) which we conservatively estimate to be nine cents.[46] This ceiling is imposed across the board on all countries in 1998 for reasons explained in the next section of the paper. The four scenarios are graphically depicted in figure 7.[47]

---

[46] This model and its results do not reflect a systematically declining accounting rate for illustrative purposes. With a declining accounting rate, the economic benefits of benchmarking are even greater.

[47] A complete list of assumptions and outputs are given in Appendix A.